

**Amendments to the Claims:**

1. (Previously Presented) A method of controlling wireless data transmission from a mobile terminal unit to a receiving system, wherein:

a) the terminal unit transmits data to a network via a short-range radio technology in a first mode and monitors quality of the communication link and  
5 automatically switches to a second mode in response to the quality of the communication link via the short-range radio technology falling below a first predetermined threshold;

b) the terminal unit transmits data to the network via a long-range radio technology while monitoring the quality of the communication link via the first  
10 mode and automatically switches to the first mode as soon as the quality of the communication link via the short-range radio technology is above a second predetermined threshold;

c) on switching from one mode to the other, the communication link via the radio technology of the previous mode is maintained until the link is  
15 established via the radio technology of the subsequent mode.

2. (Previously Presented) A method according to claim 1, wherein the quality of the communication link via the short-range radio technology is determined by the signal strength, the error rate and/or the signal to noise distance of the communication link.

3. (Previously Presented) A method according to claim 1, wherein the short-range radio technology is based on the Bluetooth protocol.

4. (Previously Presented) A method according to claim 1, wherein the long-range radio technology is based on a WLAN standard.

5. (Currently Amended) A method ~~according to claim 1 of~~ controlling wireless data transmission from a mobile terminal unit to a receiving system, wherein;

a) the terminal unit transmits data to a network via a short-range radio technology in a first mode and monitors quality of the communication link and automatically switches to a second mode in response to the quality of the communication link via the short-range radio technology falling below a first predetermined threshold, the terminal unit having has sensors for measuring physiological parameters of a patient;

b) the terminal unit transmits data to the network via a long-range radio technology while monitoring the quality of the communication link via the first mode and automatically switches to the first mode as soon as the quality of the communication link via the short-range radio technology is above a second predetermined threshold;

c) on switching from one mode to the other, the communication link via the radio technology of the previous mode is maintained until the link is established via the radio technology of the subsequent mode..

6. (Previously Presented) A method according to claim 1, wherein the communication via the short range radio technology is carried out using stations of the receiving system that are spatially separated from stations of the long range radio technology.

7. (Previously Presented) A method according to claim 1, wherein when switching between two radio technologies, the transmitted data streams are synchronized.

8. (Previously Presented) A patient monitoring system for mobile acquisition of a patient's physiological parameters, comprising a mobile terminal unit and a receiving system, which is arranged to carry out a method according to claim 1 .

9. (Previously Presented) A patient monitoring system according to claim 8, wherein the receiving system comprises a first station with which the terminal unit can communicate via the short-range radio technology, and a second

station with which the terminal unit can communicate via the long-range radio  
5 technology.

10. (Previously Presented) A patient monitoring system  
according to claim 9, wherein the first and second stations are networked.

11. (Previously Presented) A patient monitoring system for  
mobile acquisition of a patient's physiological parameters, comprising:

at least one mobile terminal unit which acquires the patient's  
physiological parameters, the mobile terminal unit being configured to:

5 transmit physiological parameter data to a network via a  
short range radio technology in a first mode while monitoring a quality  
of a communication link via the short range radio technology, and  
switch to a second mode in response to the quality of the  
communication link via the short range radio technology falling below  
10 a first predetermined threshold, and

transmit the physiological parameter data via a long  
range radio technology in the second mode while monitoring the  
quality of the communication link via the short range radio technology  
and switch automatically back to the first mode as soon as the quality  
15 of the communication link via the short range radio technology is  
above a second predetermined threshold, and

maintain the communication link via the short range  
radio technology until the communication link is established via the  
long range radio technology when switching from the first mode to the  
second mode, and maintain the communication link established via the  
20 long range radio technology until the communication link is  
established via the short range radio technology when switching from  
the second mode to the first mode, such that at least one  
communication link is always maintained; and

25 a receiving system which receives the physiological parameter data  
from the at least one mobile terminal unit, the receiving system including:

a first station which communicates via the at least one mobile terminal unit via the short range radio technology, and

30 a second station which communicates with the at least one mobile terminal unit via the long range radio technology.